

PowerVision - Release 2.0

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Introduction

PowerVision uses NEOchrome pictures, that have been compressed using the program called COMPRESS.PRG on the product disk, and a file of command statements, to produce a slide show presentation that is user controlled. Pictures may be uncompressed using UNCOMPRS.PRG on the product disk which allows it to be read back into NEOchrome for modification.

The normal 32K (32128 bytes) CAN be processed through PowerVision, but there really wouldn't be any sense in not compressing the pictures. Depending on the pictures contents, picture files can be reduced to as small as 300 or 400 bytes.

If using a 520ST with TOS in ROM (not booting from disk), then boot the machine with the PowerVision disk in DRIVE A. If TOS is in RAM (booting from a systems disk) then boot the machine normally, remove the systems boot disk, and insert the PowerVision disk in DRIVE A. Then move the mouse to OPTIONS on the desktop, and double-click on SET PREFERENCES. If in LOW resolution, click on MEDIUM and then on OK. If in MEDIUM resolution, click on LOW and then on OK. By changing the resolution, the DESKTOP.INF file on the PowerVision disk will set up certain items needed for PowerVision. The resolution does not have to be left to the opposite of what the user wants, it can be changed just to install the desktop information, and then changed back. We realize this may be inconvenient, but it has to be done to properly install the compress and uncompress programs as applications.

What the above procedure will do is set up COMPRESS.PRG to compress any file with an extension of .NEO which is how the files are saved by NEOchrome, and UNCOMPRS.PRG to uncompress any file with an extension of .CMP, which is what files are renamed to when they are compressed. To compress a picture, simply double-click on picname.NEO, and to uncompress the picture, double-click on the picname.CMP file.

Creating the NEOchrome Picture

As of Release 2.0, PowerVision will compress, uncompress, and display low-res pictures created with Degas and N-Vision. Low-res Degas pictures have a file extension of .PI1, and N-Vision pictures, .SC0.

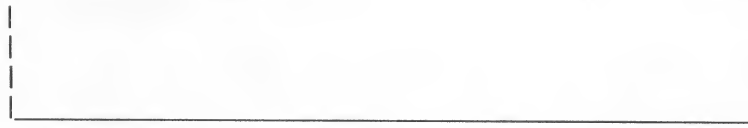
Additionally, PowerVision will display basic NEOchrome pictures that have not been processed through the COMPRESS program. This provides faster display time, and improves animation effects.

Creating the Picture

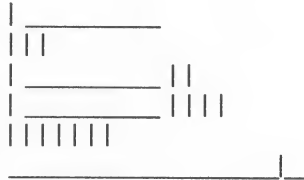
A picture to be used in a slide show presentation should be completely created, and put into separate pieces later. For example, if the user wanted to develop a slide show depicting company sales for the year, he might follow these steps:

- 1) Load NEOchrome
- 2) Use area fill with the color white to color in the entire background
- 3) Use line-draw to draw a base line along the bottom, and a scale line along the left of the display, using blue. It would look something like this:

|
|



- 4) Next he would use red, and line-draw to draw 3 line graphs, showing sales in 1982, 1983, and 1984. Using area-fill, he fills them in to highlight them. Then he would have something like this:



- 5) Next, using T (text), he might identify the fields, like so:

```

4000 | _____
sales in 3000 |  ||
hundreds 2000 | _____ ||
of dlrs. 1000 | _____ |||
500 |||||
0 _____
1982 1983 1984

```

- 6) Having the presentation picture completed, he would save it as a work file, for example, WORK.NEO.
- 7) Remembering that the background color is white, he would area-fill every field with white except the base and vertical indicator lines, and then save the picture as SALES1.NEO.
- 8) Now, he would edit the original work file, that is still intact with all the information, and using area-fill with white, he would area- fill the stack lines above each of the years, and save the picture as SALES2.NEO.
- 9) Next, he would edit the original work file, and white area-fill above the years 1983 and 1984, and save it as SALES3.NEO.
- 10) Now, he would again edit the original work file, white area-fill the the 1984 sales line, and save it as SALES4.NEO.
- 11) With this done, taking about 5 to 10 minutes, exit from NEOchrome, and double-click on each of the .NEO files, remembering that there are five of them, SALES1, SALES2, SALES3, SALES4, and WORK. This will compress each of the .NEO files, leaving the original files on the disk, which may be deleted, to save space.
- 12) Now, the only thing left to do is to build the command file. If the display command file is placed in filename AUTODEMO, when the user double-clicks on POWRVISN.PRG, the commands in AUTODEMO will be auto- matically executed, otherwise any filename may be used, and the RUN command used to specify which file the commands are in.

13) Here is what the command file stream might look like:

```
-start
show SALES1.CMP clear
show SALES2.CMP overlay
wait 100
show SALES3.CMP overlay
wait 100
show SALES4.CMP overlay
wait 100
show WORK.CMP overlay
wait 500
goto -start
```

14) Each of the commands shown above are described in detail in Section 3, but briefly, -start is an address, and there may be any number of them in the command file, as long as they have different names. The SHOW command is a simple display command, and CLEAR means to clear anything that is currently on the screen before displaying anything, whereas OVERLAY means to overlay the old picture with the new data. The WAIT instructions tell PowerVision to wait for nnnn/50 seconds before performing the next instruction, and the GOTO simply branches to the specified address of -START.

There are many different commands for controlling picture display and quite a few options that can go with them. The best way to become familiar with their usage and how to control the slide show, is to spend some time with the commands in Section 3, and have some fun.

BLINK command

Command: BLINK picname.CMP options

Explanation: This command will cause the picture to blink onto the screen, doubling the blink speed each time, until stationary display of the picture is attained.

CLEAR LAST command

Command: CLEAR LAST

Explanation: When this command is used, the previously displayed picture will be cleared just prior to the next picture being displayed. This will be useful in situations where the user wants to display a base picture, say for example, a chart of total sales, and there are other pictures used to explain areas of the sales chart. By using the CLEAR LAST command, an explanation picture can be put on the sales chart, then cleared and another explanation picture displayed, and so on. This would keep the explanations from overlaying each other, and becoming unreadable.

CURTAIN command

Command: CURTAIN picname.CMP option1 option2 option3 option4

Explanation: The curtain command will, depending on the options used, perform various functions that resemble a curtain opening, closing, etc.

MERGE command

Command: MERGE picname.CMP option1 option2

Explanation: The MERGE command will display the picture with a venetian blind effect.

MESH command

Command: MESH picname.CMP options

Explanation: This command will cause the picture to be slivered into eighth inch pieces, odd numbered pieces entering from the left of the screen, even numbered entering from the right, and fitting together to form the final picture. See page 3.6 for options description.

RAINBOW command

Command: RAINBOW options

Explanation: Causes a rainbow effect to display on the screen, even if a picture is currently displayed. The options are:

ON, OFF, ON FOREGROUND, ON BACKGROUND, ON SIDEWAYS, ON FOREGROUND SIDEWAYS, ON BACKGROUND SIDEWAYS.

The rainbow will be affected by the color of background and foreground, but should generally be used with transparent black background, or white foreground.

ROLL command

Command: ROLL picname.CMP options

Explanation: This command will roll the picture onto the screen. If, for example, ROLL DEMOPIC1.CMP DOWN OVERLAY were used, the picture named DEMOPIC1 would be displayed writing one line at a time, from the top of the screen to the bottom. See page 3.6 for more detail on the options.

SHOW command

Command: SHOW picname.CMP options

Explanation: Causes immediate display of the picture. See page 3.6 for more detail on the options.

SPEED command

Command: SPEED nn where nn is a numeric value

Explanation: On the picture display control commands where allowed, SPEED may be used to control how quickly or slowly the picture display is performed. The lower the number used in 'nn', the faster the command is performed. Higher numbers make it go slower.

SET command

Command: SET keyname label or SET keyname function

Explanation: Used to set keyboard keys to specific functions.

The valid keyboard keys to be used are:

F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, HELP, UNDO, RETURN

The valid functions the keys can be set to are:

CONTINUE, PAUSE

Valid label names are anything that is up to eight characters long, and begins with a dash (-), for example, -start or -list.

The command to set, for example, the F1 key to go to a label in the command stream, would be:

SET F1 -start

To set the RETURN key to PAUSE, the user would put this in the command stream:

SET RETURN PAUSE

WAIT command

Command: WAIT nnnnn

Explanation: Tells PowerVision to wait nnnnn/50th seconds before performing the next command. If WAIT 500 was used, the delay would be 500/50 or 10 seconds. If WAIT with no number is used, any valid key being pressed will continue the presentation.

GOTO command

Command: GOTO -labelname

Explanation: Used to tell PowerVision to go to a label in the command stream. There may be any number of labels in the command language, so long as there aren't two of the same name.

ESCAPE command

Command: ESCAPE on/off

Explanation: If escape is set on then at any time during the slide show the presentation can be interrupted by pressing the Esc key. Setting Escape off disables this key.

RUN command

Command: RUN Filename

Explanation: This command is used to pass control to another command file from within a command file. This command is useful when you have a main menu and you want to keep the options in different command files.

END command

Command: END

Explanation: Tells PowerVision to Exit back to the operating system.

BACKLOAD command

Command: BACKLOAD picname.cmp

Explanation: When BACKLOAD is used just prior to a CURTAIN OPEN command, the picture will be loaded behind the current picture. When CURTAIN picname.CMP OPEN is used, and the curtain opens, the backloaded picture will appear as the curtain opens.

CSPEED command

Command: CSPEED nn where nn is a numeric value

Explanation: When a NEOchrome picture file is saved with the color palatte rotating, the speed the colors rotate can be externally altered with this command. The lower the number, the faster the color movement. The picture MUST have been saved with the colors moving while

viewing in NEOchrome for this command to be used. We recommend that the number used not be greater than 99, as it will rotate very slowly.

FLASH command

Command: FLASH picname

Explanation: This command will cause the picture to be 'flashed', a single time on the screen. The length of time the picture is retained is controlled by using the SPEED option.

PATTERN command

Command: PATTERN picname.cmp OPTION

Explanation: This command will cause pictures to display using special patterns as specified in the option field. Allowable options are: POINTS, SPIRAL, BOX, FADE, WEDGE, JAGGED, and DIAMOND

Additionally, REVERSE may be used after the display option to reverse the type of pattern that is done.

Example(s): PATTERN STARSHIP.CMP BOXES or PATTERN BUGSBUNY.CMP SPIRAL REVERSE

Description of Options for Display Commands

Review the following table of options:

Option 1	Option 2	Option 3	Option 4	Option 5
===== ===== ===== ===== =====				
OPEN	LEFT	OVERLAY	REMOVE	SPEED
_____	_____	_____	_____	_____
CLOSE	RIGHT	UNDERLAY	-----	-----
_____	_____	_____	_____	_____
-----	UP	-----	-----	-----
_____	_____	_____	_____	_____
-----	DOWN	-----	-----	-----
_____	_____	_____	_____	_____

The options above, go with the commands below

BLINK option 3 option 4 option 5

CURTAIN option 1 option 2 option 3 option 4 option 5

FLASH option 5

MERGE option 3 option 4 option 5

MESH option 3

ROLL option 2 option 3 option 5

SHOW option 3

This is to say, for example, that any of the options listed in the table, can be used on the CURTAIN command, but only the option 3 options can be used with MESH or SHOW.

Now to explain what each option will do:

OPEN - gives the appearance of a curtain opening, starting in the center and separating to both sides, unless one of the OPTION 2 options are used, in which case, the curtain will open in the OPTION 2 direction.

CLOSE - same usage as OPEN, except the curtain closes.

LEFT, RIGHT - used with the CURTAIN or ROLL to control the direction of picture UP, and DOWN display.

OVERLAY - causes the picture to overlay the currently displayed picture.

UNDERLAY - displays the picture under the currently displayed picture.

REMOVE - causes the picture currently being displayed, to be removed from the monitor, just prior to displaying the next picture.

Command Language Samples

Following, are samples of the command language used to run a slide presentation.

Not all commands are covered, but it will give the user a general idea of format and structure. First, the coding rules.

- 1) Options may be in any order, but the command and picture name MUST be together.
Example:

BLINK PICTURE1.CMP OVERLAY is correct

BLINK OVERLAY PICTURE1.CMP is not correct because the command BLINK and the name of the picture are not together.

- 2) Commands may begin in any column, as long as the entire command is on one line. For ease of reading, we suggest that labels (-labelname), start in column 1, and other commands begin in column 10, with SET, WAIT, and GOTO commands beginning in column 15. Everything is easier to find this way.

Now, on to the command samples. It is advisable that the user review the demo that is on the product disk, which outlines most all of the commands, and for a quick reference, look at the AUTODEMO file and uncompress some of the picture files used in the demo to see how the pictures were put together, by loading them back into NEOchrome.

- 1) BLINK picname1.CMP OVERLAY - will blink the picture onto the screen using the overlay option, which completely overwrites the current display.

- 2) CURTAIN picname2.CMP CLOSE REMOVE - will first remove the picture currently on the screen, then display the new one, like a closing curtain, starting at both sides and meeting in the middle. Notice the OVERLAY option is not present. There is no need to overlay the old picture, as we removed it before displaying the new one.
- 3) SHOW picname3.CMP OVERLAY - will overlay the current picture with the new one by simply 'popping' it onto the screen.

Review the AUTODEMO file on disk for more examples.

Running a PowerVision Slide Show

Let's assume that the user has created several pictures, and now wants to create the command language to run the slide show. Using a word processor without the data compression feature, or a text editor, the user creates a file of command statements and saves it to disk with the name of SHOW. Remember that if a file is on the disk by the name of AUTODEMO, when POWRVISN.PRG is double-clicked, the AUTODEMO file is the one that will be run. Simply delete or rename it to a new name. Then, when POWRVISN.PRG is double-clicked, the PowerVision screen appears and waits for the user to enter a command. Valid commands are:

```
RUN filename  
or  
END
```

RUN will execute the file. A pre-execution scan is done of command statements, and if any errors are found, an error message is displayed and the show is not run. If a picname.CMP statement is encountered for a picture that does not exist, the show will be interrupted, returned to the PowerVision screen, and a message that identifies the picture that couldn't be located is displayed.

During execution of the slide show, pressing the ESC key will terminate the show and return to the PowerVision screen, Unless the command Escape off has been issued.